

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|-----------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | Section B | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | | Sign & Date | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 69307

Sunday, May 08, 2011 9:14:57 AM



Page 2

Item ID: D412-664-203TRN

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Turning Detail

Start Date: 5/8/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 5/8/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC1- Inspect dimensions to dimension sheet

0.00



QC

Memo

0.00

Quality Control

J.F.S./

11/05/09

1

Ø

140

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

SL 11/05/09

150

Crosstubes Chemical Conversion

0.00



HandFXtube

Memo

0.00

Hand Finishing Crosstubes

1

Ø

BE 11/05/10

BE 11/05/10

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|-----------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | Section B | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | | Sign & Date | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 69307

Sunday, May 08, 2011 9:14:57 AM



Page 3

Item ID: D412-664-203TRN

Accept



Setup Start



Revision ID:

Stop



Item Name: Crosstube Turning Detail

Start Date: 5/8/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 5/8/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC3- Inspect Part Finish

0.00

SAD
11-05-10

QC

Memo

0.00

Quality Control

170

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and stock in kanban rack
Location: Landing
GearSAD
11-05-10

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

u/s/11 JG

u/s/10

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|--|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | Section B | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

Sunday, May 08, 2011 9:14:55 AM

Page 1

Work Order ID: 69307



Parent Item: D412-664-203TRN



Parent Item Name: Crosstube Turning Detail


Start Date: 5/8/2011

Required Date: 5/8/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 08-03-06 new issue DD verified by:eec
IPP Rev B 08.04.02 Removed polish EC verified by: DD

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|--|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D6009-129  Crosstube Material | | Manufactured | No | | | 120 | Each | 32.0000 | 1 | 1 | | | |

Location

Loc Qty

Loc Code

LG

32

65179

32

1 *sent 11/05/08*

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|--|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | Section B | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: Date & initial all entries

| Item | Qty | Part Number | Description |
|------|------|----------------|---|
| | -243 | | |
| 1 | X | D412-664-243 | CROSSTUBE ASSEMBLY (412 HIGH AFT) |
| 2 | 1 | D6009-129 | CROSSTUBE |
| 3 | 2 | D3595-063-570 | RUBBER CUSHION |
| 4 | 1 | D2896-1 | SUPPORT |
| 5 | 2 | D3189-1 | CHAFING SHIELD |
| 6 | 2 | D2856-600-1009 | ABRASION STRIP |
| 7 | 4 | MS21920-28 | CLAMP |
| 8 | 2 | MS21920-30 | CLAMP (OR MS21920-32) |
| 9 | A/R | MAGNOBOND 6398 | ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE) |

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6009-129
FINISHED LENGTH = 124.100±0.020 (BEFORE BENDING/TRIMMING)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D412-664-243" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS.
- 7) WEIGHT: 47.0 lbs (PER IIN-D212-664)
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2896-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2896-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-30 CLAMPS (OR -32) WITH D3595-063-570 RUBBER CUSHIONS TO SECURE THE D2896-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT.
- 14) INSTALL D2856-600-1009 ABRASION STRIPS WITH A 0.13 REF GAP ON BOTTOM SIDE OF CROSSTUBE PER QSI 035.
- 15) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 16) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

#69307

DEO ATTACHED

RELEASED
2009-10-29

| | | | |
|------------|---|---|--------------|
| E | REFORMAT/REVISE GENERAL NOTES; REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS; RELOCATED FLAG #6 PER PAR 08-046 (ZN A6-3); ADD TOLERANCE (ZN B6-3, C4-3, C8-3 & C5-3); MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4. | RF | 09.09.30 |
| D | REMOVE D2732-058, CHANGE TO D3595-063-570 | PH | 07.03.09 |
| C | REMOVE D2856-600-1087, ADD D2732-058 & MAGNOBOND 6398, MS21920-32 WAS MS21920-30 | MB | 06.10.27 |
| B | ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES | PH | 05.02.04 |
| A | NEW ISSUE | PH | 01.10.17 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | PH | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | 92 | DRAWING NO. | REV. E |
| MFG. APPR. | 10 | D412-664-243 | SHEET 1 OF 4 |
| APPROVED | 10 | TITLE | SCALE |
| DE APPR. | 10 | CROSSTUBE ASSEMBLY (412 HI AFT) | NTS |
| DATE | 09.09.30 | COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | |

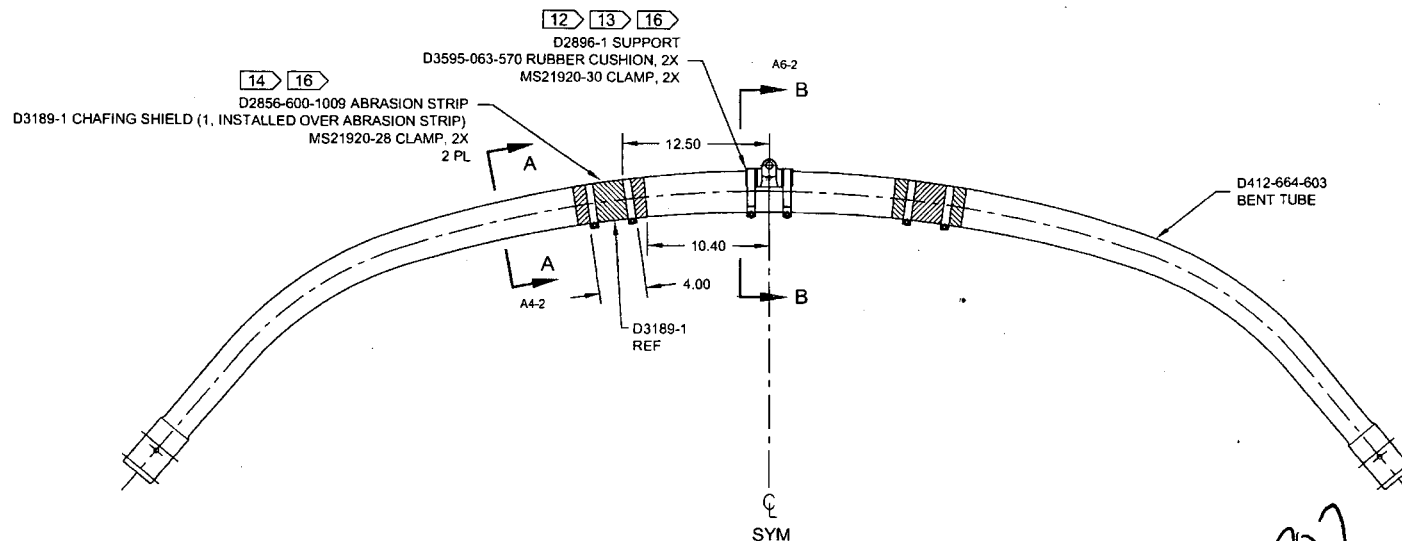
| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

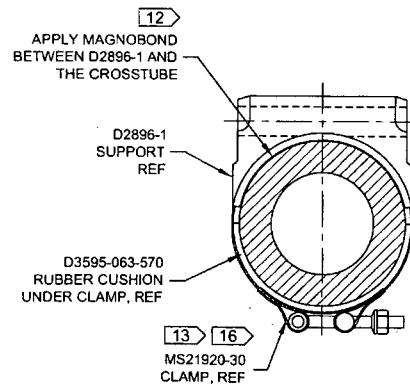
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

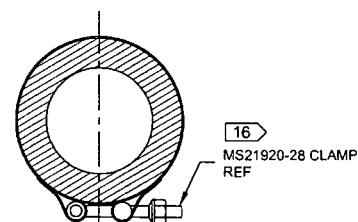
NOTE: Date & initial all entries



D212-664-243
ASSEMBLY DETAIL E



SECTION B-B D4-2
SCALE 4X



SECTION A-A C6-2
SCALE 4X

| | | | |
|------------|----------|--|--------------|
| DESIGN | PH | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | 92 | DRAWING NO. | REV. E |
| MFG. APPR. | 18 | D412-664-243 | SHEET 2 OF 4 |
| APPROVED | 18 | TITLE | SCALE |
| DE APPR. | 18 | CROSSTUBE ASSEMBLY (412 HI AFT) | NTS |
| DATE | 09.09.30 | <small>COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR FOR COMMUNICATION TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> | |

DEO ATTACHED

RELEASED
2009-10-29
NRP

69307

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|--|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | Section B | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

D

C

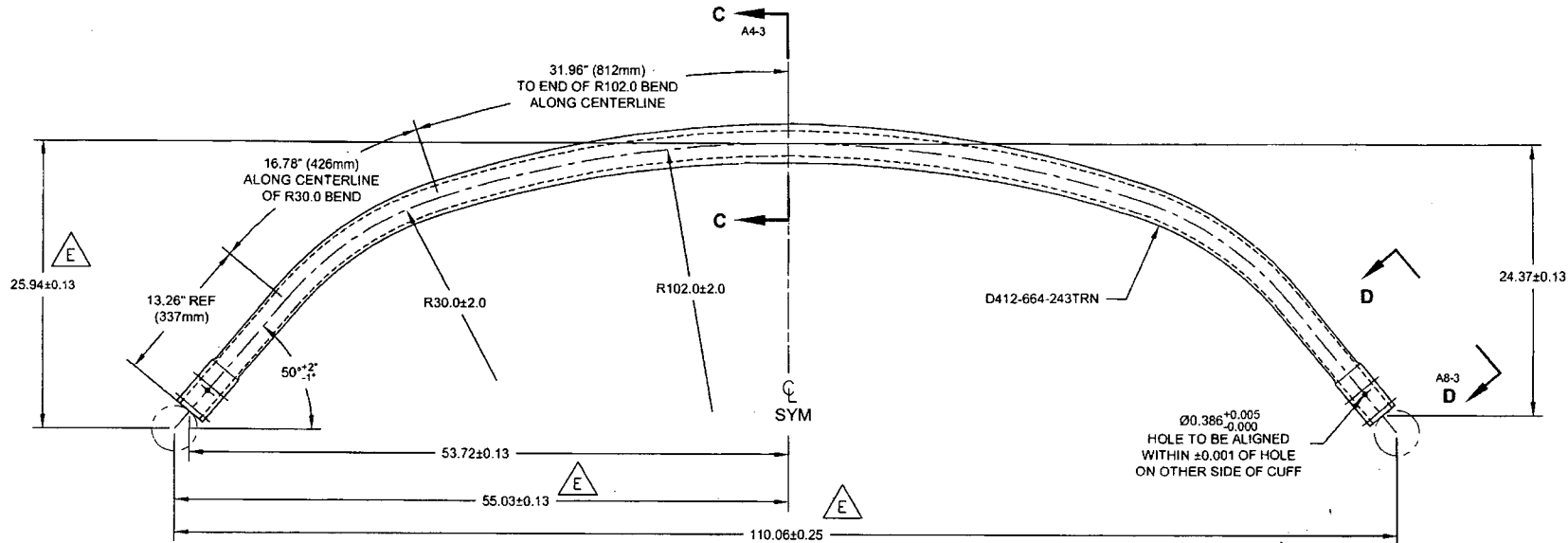
C

B

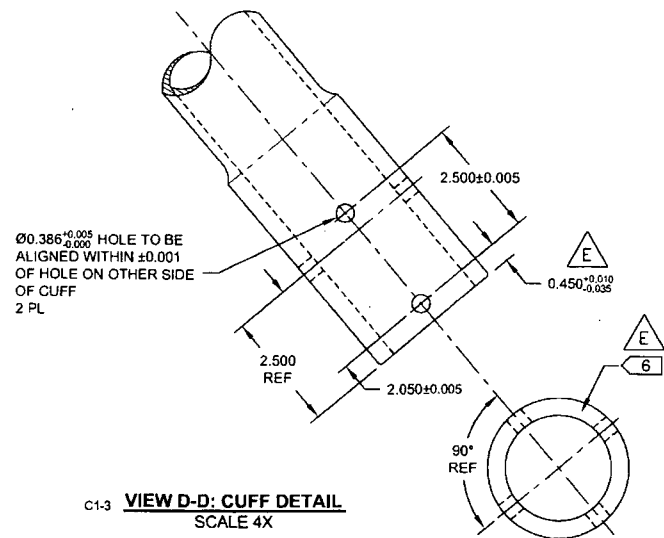
B

A

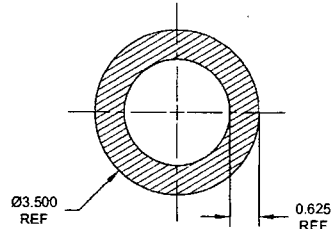
A



D412-664-603 10
BENDING AND DRILLING DETAIL E



VIEW D-D: CUFF DETAIL
 SCALE 4X



SECTION C-C D5-3
 SCALE 4X

#69307

DEO ATTACHED
RELEASED
 2009-10-29
 MD

| | | |
|------------|----------|---|
| DESIGN | PH | DART AEROSPACE LTD |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA |
| CHECKED | 92 | DRAWING NO. REV. E |
| MFG. APPR. | 10 | D412-664-243 SHEET 3 OF 4 |
| APPROVED | 10 | TITLE SCALE |
| DE APPR. | 10 | CROSSTUBE ASSEMBLY (412 HI AFT) NTS |
| DATE | 09.09.30 | COPYRIGHT © 2001 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small> |

8 7 6 5 4 3 2 1

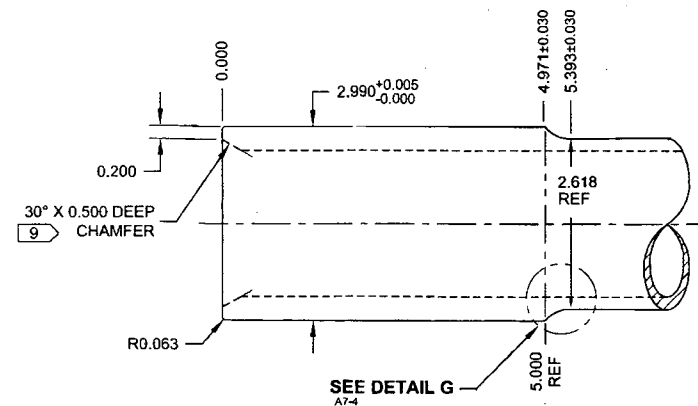
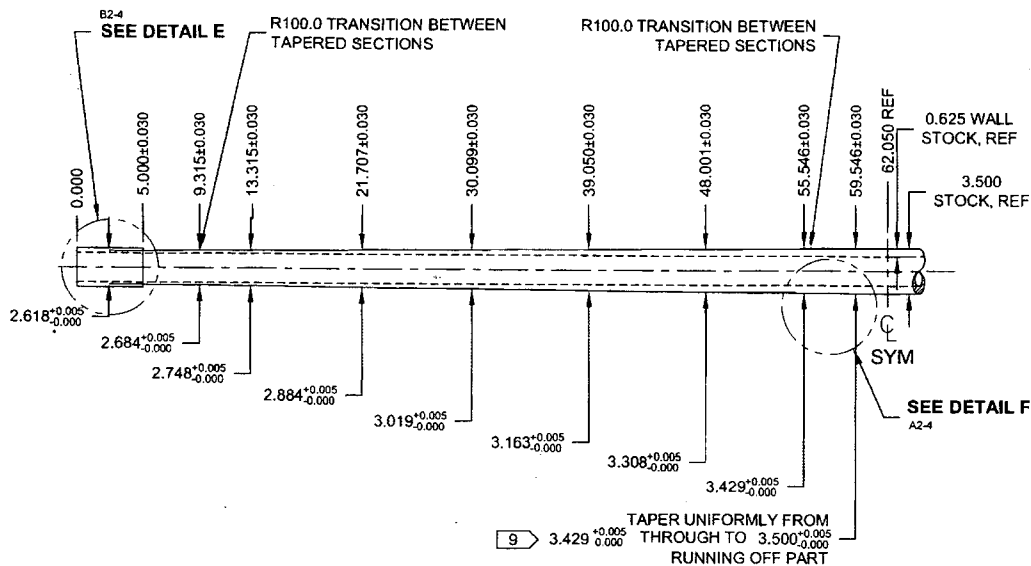
| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

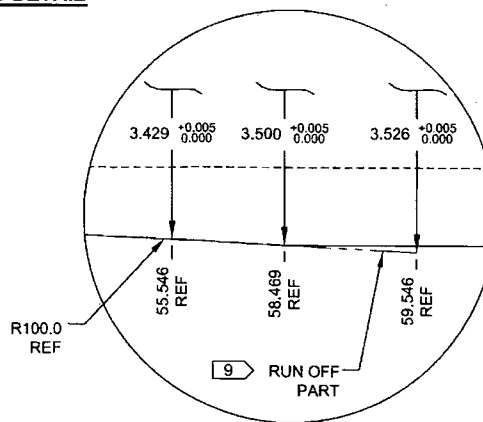
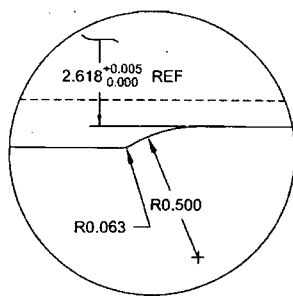
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



D412-664-243TRN
TURNING DETAIL \triangle



#69307

DEO ATTACHED

RELEASED
2009-10-29

| | | | |
|------------|----------|---|--------------|
| DESIGN | PH | DART AEROSPACE LTD | |
| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | 9P | DRAWING NO. | REV. E |
| MFG. APPR. | 18 | D412-664-243 | SHEET 4 OF 4 |
| APPROVED | 10 | TITLE | SCALE |
| DE APPR. | 14 | CROSSTUBE ASSEMBLY (412 HI AFT) | NTS |
| DATE | 09.09.30 | <small>COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small> | |

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|--|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | Section B | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: Date & initial all entries

| | | | | | | | |
|-----------------------------|--|---------------------|---|--------------------|--------------------------------|---------------------------|--------------|
| DRAWING NO. D412-664-243 | TITLE CROSSTUBE ASSEMBLY (412 HI AFT) | REV. E | DART AEROSPACE LTD ENGINEERING ORDER | | D.E.O. NO. D412-664-243-E-1 | SHEET NO. SHEET 1 OF 2 | SCALE NTS |
| DRAWN | CHECKED <i>MP</i> | MFG. APPR. <i>E</i> | APPROVED <i>MP</i> | DE APPR. <i>MP</i> | | | |
| DATE 11.03.31 | DATE 11/03/31 | DATE 11.03.31 | DATE 11/03/31 | DATE 11.03.31 | | | |

PURPOSE:

REMOVED ABRASION STRIP IN FAVOR OF A THIN LAYER OF PROSEAL 890.

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

IS:

| Item | Qty -243 | Part Number | Description |
|------|-------------|----------------|----------------|
| 6 | 0 | D2856-600-1009 | ABRASION STRIP |

WAS:

| | | | |
|---|---|----------------|----------------|
| 6 | 2 | D2856-600-1009 | ABRASION STRIP |
|---|---|----------------|----------------|

NOTES 2 AND 14, SHEET 1 ARE AMENDED AS FOLLOWS:

IS:

- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
MASK UNDERSIDE OF CROSSTUBE AS SHOWN (HATCHED AREA)
PAINT OUTSIDE PER DART QSI 005 4.2
AFTER PAINTING, APPLY CLEAR COAT ON HATCHED AREA
- 14) APPLY A THIN COAT OF PROSEAL 890 ON INSIDE CONCAVE SURFACE OF D3189-1
CHAFING SHIELD AND LET CURE PER MANUFACTURER'S INSTRUCTIONS. INSTALL
PROSEALED D3189-1 CHAFING SHIELD ONTO CROSSTUBE BY APPLYING A THIN COAT OF
PROSEAL 890 ONTO CROSSTUBE. BE SURE TO ELIMINATE ANY AIR GAPS.

WAS:

- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 14) INSTALL D2856-600-1009 ABRASION STRIPS WITH A 0.13 REF GAP ON BOTTOM SIDE OF
CROSSTUBE PER QSI 035.

#69307
RELEASED
2011-04-07
MP

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | | |
|------|------|----------------------------------|----------------------|---------------------------------|----------------|--|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action | | Section B | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

NOTE: Date & initial all entries

| | | | | | | |
|-----------------------------|--|-------------------------------|---|--------------------------------|---------------------------|--------------|
| DRAWING NO. D412-664-243 | TITLE CROSSTUBE ASSEMBLY (412 HI AFT) | REV. E | DART AEROSPACE LTD ENGINEERING ORDER | D.E.O. NO. D412-664-243-E-1 | SHEET NO. SHEET 2 OF 2 | SCALE NTS |
| DRAWN <i>[Signature]</i> | CHECKED <i>[Signature]</i> | MFG. APPR. <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DE APPR. <i>[Signature]</i> | | |
| DATE 11.03.31 | DATE 11.03.31 | DATE 11.03.31 | DATE 11.03.31 | DATE 11.03.31 | DATE 11.03.31 | |

IS:

D3189-1 CHAFING SHIELD (1, INSTALLED OVER PROSEAL 890)
MS21920-28 CLAMP, 2X
2 PL

D412-664-603
BENT TUBE

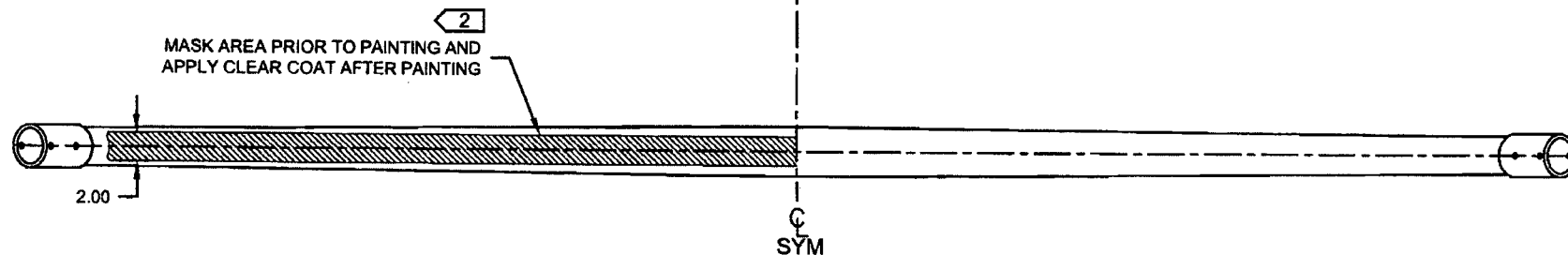
2.00
1.00

WAS:

D2856-600-1009 ABRASION STRIP
D3189-1 CHAFING SHIELD (1, INSTALLED OVER ABRASION STRIP)
MS21920-28 CLAMP, 2X
2 PL

D3189-1
REF

**D412-664-243
ASSEMBLY DETAIL**



RELEASED
2011-04-07
[Signature]

#69367

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|--|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|--------------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| | | |
|---|--|----------------------------------|
| DART AEROSPACE LTD | | Work Order: 69307 |
| Description: Crosstube Assembly (412 High Aft) | | Part Number: D412-664-243 |
| Inspection Dwg: D412-664-243 Rev: E | | Page 1 of 1 |

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

| Inspection Sheet | Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|------------------|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| SIDE A | 2.684 | +0.005/-0.000 | 2.686 | ✓ | | Mic | CNC-04 |
| | 2.748 | +0.005/-0.000 | 2.749 | ✓ | | " | |
| | 2.884 | +0.005/-0.000 | 2.887 | ✓ | | " | |
| | 3.019 | +0.005/-0.000 | 3.023 | ✓ | | Mic | CNC-05 |
| | 3.163 | +0.005/-0.000 | 3.167 | ✓ | | " | |
| | 3.308 | +0.005/-0.000 | 3.313 | ✓ | | " | |
| | 3.429 | +0.005/-0.000 | 3.433 | ✓ | | " | |
| | 2.990 | +0.005/-0.000 | 2.993 | ✓ | | " | |
| | 2.618 | +0.005/-0.000 | 2.621 | ✓ | | Mic | CNC-04 |
| | 0.200 | +/-0.010 | 0.210" | ✓ | | Vern. | J.F.-01 |
| | R0.063 | +/-0.010 | R0.063" | ✓ | | B.G. | Ref. |
| | R0.500 | +/-0.010 | R0.500" | ✓ | | B.G. | Ref. |
| | 4.971 | +/-0.030 | 4.963" | ✓ | | Vern. | J.F.-01 |
| | | | | | | | |
| SIDE B | 2.684 | +0.005/-0.000 | 2.688 | ✓ | | Mic. | CNC-04 |
| | 2.748 | +0.005/-0.000 | 2.753 | ✓ | | " | |
| | 2.884 | +0.005/-0.000 | 2.889 | ✓ | | " | |
| | 3.019 | +0.005/-0.000 | 3.024 | ✓ | | Mic. | CNC-05 |
| | 3.163 | +0.005/-0.000 | 3.167 | ✓ | | " | |
| | 3.308 | +0.005/-0.000 | 3.313 | ✓ | | " | |
| | 3.429 | +0.005/-0.000 | 3.424 | ✓ | | " | |
| | 2.990 | +0.005/-0.000 | 2.995 | ✓ | | " | |
| | 2.618 | +0.005/-0.000 | 2.623 | ✓ | | Mic. | CNC-04 |
| | 0.200 | +/-0.010 | 0.210" | ✓ | | Vern. | J.F.-01 |
| | R0.063 | +/-0.010 | R0.063" | ✓ | | B.G. | Ref. |
| | R0.500 | +/-0.010 | R0.500" | ✓ | | " | |
| | 4.971 | +/-0.030 | 4.990 | ✓ | | Vern. | J.F.-01 |
| | 124.100 | +/-0.020 | 124.120 | ✓ | | M. Tape | EC-11 |

| | | | |
|-----------------------------|-----------------------|----------------------------|-----|
| Measured by: J.F.S./ | Audited by: JL | Prototype Approval: | N/A |
| Date: 11/05/09 | Date: 11/05/09 | Date: | N/A |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---------------------------------------|------------|----------|
| A | 04.06.16 | New Issue (P/O D412-664-203) | KJ/JLM | |
| B | 06.03.09 | Dwg Rev updated | KJ/JLM | |
| C | 07.05.08 | Tolerance updated for dimension 4.971 | KJ/JLM | |
| D | 10.02.02 | Dimension 124.100 was 124.09 | KJ | |

| W/O: | | WORK ORDER CHANGES | | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|--|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector | |
| | | | | | | | | |
| | | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries